

*Virginia*  
JANUARY 1968  
*Wildlife*

VOLUME XXIX / NUMBER 1  
20 CENTS





# Virginia Wildlife

*Dedicated to the Conservation of  
Virginia's Wildlife and Related Natural Resources  
and to the Betterment of  
Outdoor Recreation in Virginia*

Published by VIRGINIA COMMISSION OF GAME AND INLAND FISHERIES, Richmond, Virginia 23213



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## JANUARY

Volume XXIX/No. 1

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**COVER:** Exhibiting none of the sullen ferocity of lesser members of the weasel family, the otter has been described by Ernest Thompson Seton as "joyful, keen and fearless . . . mild and loving to his own kind, and gentle with his neighbour of the stream; full of play and gladness in his life, full of courage in his stress . . . the noblest little soul that ever went four-footed through the woods." Our artist: J. M. Roever, Cocoa Beach, Fla.

**SUBSCRIPTIONS:** One year, \$1.50; three years, \$3.50. Give check or money order, made payable to the Treasurer of Virginia, to local game commission employee or send to Commission of Game and Inland Fisheries, P. O. Box 1642, Richmond, Virginia 23213.

VIRGINIA WILDLIFE is published monthly at Richmond, Virginia, by the Commission of Game and Inland Fisheries, 7 North Second Street. All magazine subscriptions, change of address notices, and inquiries should be sent to Box 1642, Richmond, Va. 23213. The editorial office gratefully receives for publication news items, articles, photographs, and sketches of good quality which deal with Virginia's soils, water, forests, and wildlife. The Commission assumes no responsibility for unsolicited manuscripts and illustrative material. Credit is given on material published. Permission to reprint text material is granted provided credit is given the Virginia Commission of Game and Inland Fisheries and VIRGINIA WILDLIFE. Clearances must be made with photographers or artists to reproduce illustrations.

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## Enough Room for All

IT seems inconceivable that strong opposition to the Virginia Outdoors Plan could develop except as a result of misinformation and failure to understand what the plan is all about. Nonetheless, the word does seem to have been passed around that expanding the State's public outdoor recreation facilities somehow poses a threat to the mighty forest products industry.

No one who has the facts would discount the importance to Virginia of her commercial forests and her forest-based industries. No one interested in Virginia's welfare would want to see them threatened. But the point is that no such threat exists in the modest proposal to enlarge the State's holdings of open spaces in order to provide her people with accessible outdoor recreation opportunities in pleasant, natural surroundings.

In the first place, the mere acquisition by the State of a bit of productive forest land does not necessarily remove that land from productive status and threaten to dry up the source of timber products. The State's Wildlife Management Areas are a case in point. While these lands are managed primarily to produce game crops and to provide public hunting areas, the timber that these areas are capable of producing is harvested on a sound, sustained yield basis, and in the long run they are expected to yield more forest products under such management than they have in the past.

As for expanding the State Park system, the acreage of productive timber land involved is quite insignificant, even if another stick of timber is never harvested from them.

The need for additional recreational facilities exists primarily in the rapidly expanding urban and suburban areas, on lands already scheduled for early scalping by the bulldozers and subdivision by the real estate developers. Here the choice is not between recreation areas and timber, but between a little natural open space and none at all within the burgeoning megalopolis.

Virginia has some sixteen million acres of productive or potentially productive forest land. The entire proposed expansion of the State Park system could be accomplished by acquiring considerably less than a hundred thousand additional acres, some of which would not be productive forest land to begin with and a good deal of which is already scheduled for more intensive use. *Less than one half of one percent of all the potentially productive forest land in Virginia would end up in the expanded State Park system.*

These are the facts. Where the fancied threat to the industry comes from is hard to say. The arguments being advanced sound like those traditionally used by timber interests against large scale government land holdings in general, and particularly against the locking up of timber resources in extensive wilderness and park systems. Whatever their merits may or may not be elsewhere, the arguments are not relevant to the actual proposals contained in the Virginia Outdoors Plan, and their use only tends to confuse and obscure the real facts.

There is plenty of room for all of us in Virginia's great and magnificent outdoors. We are not confronted with the alternatives of timber or outdoor recreation. We can, and must, have enough of both.

It is hoped that Virginia will be able to get on with its Outdoors Plan, free from harassment by externally prepared and irrelevant lobbying material. The implication that the State and its resource managing agencies are devoted to a policy of unlimited or unreasonable land acquisition is totally false.—J. F. Mc.

### Highly Disturbed

I READ with interest your editorial "Why the Hruska Bill?" in the November 1967 issue of *Virginia Wildlife*. Your ideas were expressed much better than I could ever do, and I agree with them completely.

Unless I am mistaken the Dodd Bill has been voted out of committee over the Hruska Bill within the last few days. I am highly disturbed over the apparent readiness of many in this country to vote to pass laws, regulations and ordinances to restrict or take away the law-abiding citizen's rights that have been won through so much blood and suffering. I believe that any law-abiding citizen has a right to possess and have in his home any gun that he may find necessary for his or his family's protection. Also, for use in hunting in accordance with game laws prevailing where he hunts. I am opposed to having to obtain a permit or license from the police or to register a firearm.

I believe it is time to design laws and take action directed at the criminal and to stop harassment of law-abiding citizens. This is not a police state, a dictatorship or an occupied country. From the statements and action of some lawmakers and newspaper editorial writers, they are not aware of this.

Your editorial should be on the desk of every state lawmaker in both Richmond and Washington. There are thousands throughout the country who will not take the trouble to write their Representative because they do not believe he could vote to restrict or remove their rights. It appears that some day they may discover they do not possess any rights.

Raymond A. Butler  
Woodbridge

### Hobby



ENCLOSED are pictures of my husband, James Robbie VandeRiet, and his hobby. He has been collecting arrowheads since he was a boy spending his summers in Amelia County, Virginia. These arrowheads he has arranged and displayed on plywood surrounding tomahawk heads. Pursuing his hobby he is a member of the Archeological Society of Virginia and has found arrowhead stones on the archeological diggings. Among his several hundred they range in all sizes and shapes.

Mrs. J. R. VandeRiet  
Richmond



# Snowtime Reflections

By FRANCES REEVES OWEN  
*Bedford*

NATURE is going through her winter cycle now, and our yard is white with snow. It's time for exploring one's soul and reconditioning the mental processes. This is an interlude for rest and communing with favorite books and magazines in front of a crackling fire, munching on juicy, red apples and crisp, buttered popcorn. There will be bouts with a snow shovel now and then, but it's good to breathe the crisp, clear air, redden the cheeks, and give the muscles a workout. Back in the house is hot coffee, blazing logs, and a view from the picture window.

The bird feeder, bursting with seeds, is there among the hemlocks. The birds are frantic, sometimes quarrelsome. Humans will quarrel over almost anything—politics, football games or which is the best color television set. But our wild friends limit it to survival and sometimes a mate.

The brilliant red cardinals are breathtaking on the snow-laden hemlock boughs. The noisy bluejays wing in menacingly, scattering seed everywhere. The trim, little snowbirds and sparrows hop around on the crusty snow below, gathering the spill-over. When the black, arrogant, clumsy cowbirds bumble in, everyone leaves except me, and I go out and clap my hands sharply. With a loud clatter of wings they're gone. Then the gentle birds return.

It is such a joy and security to watch the wildfolk. They are so attuned with the universe. They instinctively prepare themselves for the seasonal cycle, the good times and bad. It is against their nature to fight against the rigors of life. They get ready for them and survive.

I love to picture in my mind my lively, skittery chipmunk in his snug burrow deep in the brown earth by the stump which is next door to the huge, white oak tree in our front yard. In May and June he scampered all over the front yard, in and out of the ivy. Just about every morning I found him sitting on his chestnut-colored, furry haunches on our front porch. When I peeked out of the big window by the door he would make a nose-dive into the ivy, barely stirring a leaf. Other times he perched on the old, rough stump overlooking the entrance of his tunnel. He could dive into that small opening too, at the approach of an enemy. He never missed.

He disappeared in September and I think about him now, underneath this heavy blanket of cold snow curled in a ball, snug in his nest in his bedroom. His entering tunnel, two inches in diameter, goes straight down for a foot or two, then slopes for a yard or two. He has three or four scooped out holes down there. One is his sleeping quarter and the others are pantry rooms for storing his nuts and crunchy

seeds. He was very careful not to put in a berry or something that would spoil for that might ruin all his winter meals. He even anticipated being very sleepy and sluggish at times so filled his bedroom with delectable morsels, then prepared his nest on top. It's so easy now to reach out a delicate forepaw and select a nut to sleepily munch on. By the time spring comes and the earth above him has warmed, he will have eaten his way down until his bed is on the bottom of the burrow. He has kept warm, snug and full.

The squirrel friends, particularly my Sammy, have their nests high in the treetops. When all the leaves fell, we could see these great wads which are their nests. We wonder why they don't come tumbling down, but the squirrels know how to anchor them. They've been building them for centuries and I don't think have tried to improve on them. This method held up for their grandfathers and is good enough for them.

They took a few naps during the hot weather, stomachs flat on a tree branch, four legs hanging down. But when fall came and acorns pelted down like bullets, the squirrels were in a frenzy! Instinct warned them it was time to store, to prepare for the rigors of winter. They rushed around madly, burying nuts everywhere in the yard, in the flower garden and under the hemlocks! They couldn't possibly remember all those hiding places. But, no matter, they'll find some of them.

Now, through our kitchen window, we watch with delight as the squirrels leap quickly through the snow. Suddenly they disappear. After a few seconds, up pops a furry head and one is munching hurriedly on a buried treasure. They look like little prairie dogs popping in and out of their snowy holes.

It is a peaceful and happy feeling knowing that the wild ones in our yard are snug, warm and well fed. They never fight change; they prepare for it.

It's wonderful to know that the jonquil, hyacinth and tulip bulbs are resting safe in the darkness of the protective earth. In my woods-garden the lady's slipper, trillium and hepatica are sleeping and gathering strength for their vigorous flowering in the early spring.

Out of each window I look on the quiet, icy whiteness and feel secure in the knowledge that this changing cycle will go on forever. The sun will rise and set. The snow and rain will fall. The wind will blow, and the thunder and lightning will boom and crackle across the sky.

This is our natural world and I know that nothing, not anything, will interfere with its continuing.

# A Day at Pocahontas

By C. P. GILCHRIST, JR.  
1967 Conservationist of the Year



Commission photo by Kesteloo

**S**HORTLY after returning from our clapper rail hunt on Mockhorn Island, we began planning a waterfowl hunting trip to the state-owned Pocahontas-Trojan Area. For those of you that did not read the article in *Virginia Wildlife* about our rail bird trip, it all started as follows:

As a result of some friendly harassment from three friends of mine, we decided to start taking a series of trips to Commission-owned areas to see just what they had to offer. The first was to Mockhorn Island, and now the second one was to be to the Back Bay area.

We wrote to the Commission office in Richmond and requested information sheets and blind application forms to reserve a shooting date on the Pocahontas-Trojan area. When the information arrived several days later, we found the following to be available: For a \$3.00 blind fee paid to the Commission we could get a blind on the Trojan area for three of us. It would be necessary for us to furnish our own equipment (boat, motor and decoys). For a \$3.00 blind fee paid to the Commission, plus \$20.00 to the guide, we could get a blind on the Pocahontas area for three of us; boat, motor, decoys and guide service would be furnished. We discussed the pros and cons of each area and finally

Long before dawn's early light we were headed down the mile-long canal between the club house and the bay.



decided on the Pocahontas area with guide service. We picked this area because for four of us to hunt we would have to have two blinds and two rigs. It is a long way to haul two ducking rigs from Tappahannock to Back Bay; and, besides, we are sort of lazy and wanted to be waited on.

Blind application forms were filled out and mailed to Richmond. Shortly after the drawing in mid-October we were notified that we had been awarded our second choice of date.

As you hunters know, about half of the fun of a hunt is the preparation that goes on beforehand. Motel reservations were at Virginia Beach, and the necessary equipment and warm clothes were gathered. Several arguments took place, such as, the best size shot to use where both ducks and geese are present.

Our shooting date fell on a Wednesday in early December, so right after lunch on Tuesday we loaded up Harold's station wagon and headed for Virginia Beach. We were met at the motel by the proprietor, whom I had known for many years. Pete told the others in the party that if they couldn't shoot any better than I could they were wasting their time as far as bringing home any meat for the table. This was all that was needed to get a lot of kidding from my companions.

After getting settled in our rooms, we went out on the town and had dinner, located a restaurant that opened early enough in the morning to get breakfast, and finally had some sandwiches made up for lunch the next day. As soon as this was completed we went to bed; it seemed like I had just closed my eyes when the alarm began to jangle.

Breakfast was a rather silent affair, as everyone was trying to wake up. After breakfast all equipment was checked and loaded in the auto. We headed south out of Virginia Beach on state route 615, as the map and instructions with the permit said we should do. About one-half mile beyond the Creeds Post Office, we saw a Commission sign marking the turnoff to the Pocahontas-Trojan area.



Several carloads of hunters had arrived before us and were getting their gear out as we drove in the yard. We entered the living room area of the old Trojan Club house and were greeted by a huge blazing open fireplace and the smell of fresh coffee. We were met by Mr. Otto Halstead, the area manager, who told us to have a cup of coffee and pull up a chair by the fire. By this time at least two members of our party were beginning to show some signs of waking up and being congenial.

Mr. Elwood Waterfield came in and introduced himself to the hunters who were present. He told them that the guides were here and we could draw for our blind. Mr. Waterfield is Halstead's assistant and is in charge of the marsh, boats and guides. He also has quite a reputation as



The Pocahontas package deal includes blind, guide, and rig, including one of these good, fast boats. Two dozen goose and four dozen duck decoys are allotted each party.

Commission photos by Kesteloo

a local weather prophet. Like most weather prophets he seems to be wrong more often than not. Today he was predicting cloudy weather with a wind shift and maybe snow. He made this prediction with such sincerity that, even though I knew how often he missed, it gave me, along with the other fellows, a boost.

We went back to Mr. Halstead's office and drew numbers out of a box for our blind location. We drew Rush Point and Johnson Island Bend. These blinds were adjacent to each other. Halstead introduced us to our guides, Sonny Freeman and Harvey Grimstead. They went out to our automobile

and helped us move our gear to the boats.

While we were doing these things other hunters had been coming in and drawing for their blinds. The Trojan hunters were putting their rigs overboard at the ramp and were standing by for leaving time.

Shooting time was one-half hour before sunrise, so we would leave the landing at one hour before sunrise or at 6:07. About 6:00 the guides loaded their hunters in the boats and got the engines warmed up to go. We started down the mile-long access canal along with 12 other boats. It was a pretty sight to see the twinkle of the lights from the boats in the canal. When we reached the bay, the boats went in all directions heading to their blinds.

Harold and I had Rush Point with Sonny Freeman; Herb and Eldon had Harvey Grimstead in Johnson Island Bend. Sonny put us in the blind and tied up his boat. Then he went and got in the decoy skiff and put out the stand of decoys. The stand was made up of 2 dozen geese and 4 dozen ducks. This only took Sonny a few minutes and then he was in the guide box immediately behind the blind. We loaded our guns and checked the time and had four minutes to wait. We could hear the geese and swans honking and whistling as they were moving about in the dim light.

As light broke we could see small flocks of geese moving from the Bay to the fields in the west to feed, and the snow geese moving from the Mackay's Island National Wildlife Refuge to the Trojan marshes to feed on the three-square grass. While we were sitting there gawking at the geese, we heard Sonny say in a whisper, "Ready on your left—take 'em." When we came up, there were a pair of widgeon (baldpate) cutting the corner of the decoys. We dropped both of them just outside of the decoys, and Sonny went out and picked them up. While he was out in the boat, a lone black duck circled high and went on to the interior of the marsh.



While we were waiting for the next flight of birds Sonny explained to us that the Pocahontas area is a 790-acre marsh island that is filled with potholes and ponds. The Commission has a total of 13 blinds on the perimeter of the marsh, of which 5 are hunted each day, depending on the wind direction and weather.

He also told us that the Trojan marsh is 350 acres and has 8 blinds located on its boundary adjacent to the Bay. All eight of these blinds are open for hunting each day.

Several flights of ducks cut by the blind, but our shooting

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Now that you have him—

What are you going to do with him?



## LET'S COOK A WILD GOOSE

By MARJORIE LATHAM MASSELIN  
*Richmond*

**W**HEN the Canada geese hit the flyways, appetites sharpen and the huntsmen are gone before sunup.

While it is true that bringing down a wild goose does not offer anywhere nearly the self-satisfaction that bagging a wild turkey does, the end product in the dining room can be equally great.

Of course, if you are aiming to impress your friends with a gift you will also be aiming for the biggest old gander at the point of the "V." If on the other hand, you have tasted wild goose and intend to feast yourself in splendor, you will also have learned to pick off a young and tender gosling from the rear of the formation. Between the two there is little if any comparison.

Now, if you like arguments and want to get a good one going, you probably can by making a firm statement on the kind of stuffing that goes into this de-feathered treasure. Most people who have developed a hankering for wild goose have also developed a rather definite idea that it is the stuffing that makes the goose, and only ONE will make it right.

The issue of the proper kind of stuffing is debated as hotly as is the best time and place to hunt this beautiful bird of the north. Should you take one on the wing from the first flight you sight—or seek one out during a rest-over, when the flock have been feeding for a few weeks, for example on the wild celery that abounds in Currituck?

The dining habits of all wild game are tremendously important to your dining pleasure, because the foods they consume affect the flavor of the flesh quite as much as the treatment you give it in your kitchen. Knowledge of this kind is what makes cooking wild game a challenge, and raises it above the tawdry task into the realm of creative art . . . haute cuisine.

A clean kill and proper handling thereafter are equally important, but these are field problems that belong to the huntsman and should not be the concern of the cook with one exception. You may be called upon to pluck various birds at times. If you have a skillful huntsman in the family

it may be worth your while to learn because it really is not difficult, and if you have ever been exposed to the luxury of a feather bed you may even welcome the task. Nothing but nothing fills a feather bed more luxuriously than goose down plucked from the breast. It will take a long time to accumulate the bulk that is necessary, but it is time and effort well spent. My grandmother used to do it, and I still have some feather pillows in use. One of their greatest attributes is that they can be thrown into the washer and dried in the drier, and assuming that you had the foresight to check the seams for security beforehand, they come out better than ever for the rough treatment!

To accomplish the plucking easily, you plunge the poor beastie into a bath of scalding water. I don't know WHY this works; I just know it does. Then you knot the down in a sturdy old pillow case and give it the washer-dryer treatment. After that you store the completely dried feathers in a completely dry place until you are ready to add to the cache or to use them constructively.

If you are stuck with cleaning the goose, too, even that can be done painlessly if you have a basic knowledge of the anatomy of the goose. You make a slit with a very sharp knife from the end of the breast bone or just past it, to the tail. Then you reach in and cautiously pull out the entrails being extremely careful not to break the gall bladder as this is close to the liver which is a great delicacy that you will wish to use. If tinged with gall, it becomes bitter and inedible.

This done, the next step is to wash the goose in cold, running water. If the pinfeathers are heavy or imbedded they will require special treatment. Singeing will remove the light hairy coating that often remains after de-feathering, and will serve to loosen the pinfeathers so that they can be pulled out with the fingers or with tweezers. In extreme cases it may be necessary to use the same coating of hot paraffin brushed on with a clean paint or pastry brush that you use for getting the recalcitrant pinfeathers out of a

(Continued on page 19)



# FUR FOR FUN AND FINANCES

By BOB GOOCH  
Troy

**F**OR two days I had been sloshing through the snow-covered mountains of southwestern Virginia in a vain effort to bag a couple of grouse. This is grouse country, and Charlie Peery had put me into some good cover, but the combination of weather and a slack year for the mountain birds had me licked. The glow of a Saltville restaurant beamed a welcome, and I slid into a booth for a late dinner.

My order placed, I settled back with the local newspaper.

As I scanned the headlines, my eyes focused on a brief news story covering a team of state trappers operating in the area. Limited fox trapping is a rabies control measure practiced in the Old Dominion.

"Over a million dollars worth of fur is going to waste every year in Virginia," the story quoted Gerald T. Blank, chief of the government trappers. Blank explained that a lack of interest in the ancient art of trapping was responsible for this loss of unharvested fur.

The professional trapper's statement echoed thoughts that had been running through my own mind for several years. Were American outdoorsmen, often pressed for good hunting and fishing, not overlooking this golden opportunity for some additional fun as well as a little cash? After all, successful trapping requires outdoor skills and a knowledge of wildlife habits—the same ingredients so necessary to hunting and fishing success. For years I had been filling the late winter lull between the Virginia hunting and fishing seasons by running a modest trapline.

A wide variety of fur bearers await the prospective trapper. The more common species, such as muskrats, minks, raccoons, opossums and skunks, exist just about nationwide. Coyote and martens roam the West, and the northern evergreen forests are home to lynx and fisher. Also found throughout most of the United States are the wily fox and the webfooted otters.

Most popular among trappers are the beaver, mink and muskrat—muskrats because they are abundant and relatively

Muskrats contribute most to the fur harvest almost everywhere, not because their individual pelts are most valuable, but because there are so many of them.

L. L. Rue III photo



Commission photo by Engle

Lots of fur goes to waste each year because of lack of interest in trapping, but here is some that didn't. Beaver in the center is flanked by two large mink. The rest are muskrat.

easy to catch, and minks and beavers because of the higher prices their furs command.

Muskrats top the list on most state fur reports. For the 1965-66 season in mountainous Colorado, for example, muskrat pelts accounted for 25,970 of the 31,117 fur pelts reported, while in Virginia they numbered a quarter of a million out of 343,000 total pelts. In Ohio there were 417,365 'rats in the total harvest of 608,992 pelts. Bryant R. Chaplin of the Massachusetts Division of Fisheries and Game says, "Any trapper who really will work could clean up on rats." Part-time trappers took 33,960 muskrats in his state during the 1965-66 season.

Beavers, otters, and minks, fewer in number and more difficult to trap, contribute heavily to the national trapping income because of the higher prices they bring in the fur market. In one market area the average 1965-66 muskrat pelt brought only \$1.45 whereas beavers averaged \$15.50 and minks \$11.00. Otter pelts also sold well.

Most states report a harvestable surplus of fur bearing animals—a surplus that could be removed annually without damaging this valuable wildlife resource. Gerald Blank estimates the *unharvested* Virginia fur loss at over a million dollars, but what is the value of our harvested fur crop? The figures are far from being insignificant.

The monetary value of Ohio's 1965-66 harvest was \$1,245,160, and the figure has run in excess of \$750,000 for the past five years. An increase in fur prices was the reason for this 1966 trapping bonanza as there was no substantial change in the number of pelts taken. Based upon the number of pelts reported it would be safe to guess that Virginia's fur catch is valued at over half of Ohio's, or between \$500,000 and \$1,000,000 annually. Across the continent, Washington trappers in 1966 reaped a \$302,725.60 harvest. On the other hand, in Oklahoma, where there is a notable lack of interest in trapping, the annual catch runs under \$10,000.

The decline in fur prices has been a major contributor to the sagging interest in this healthy outdoor activity. Only a handful of veterans, infected with an incurable trapping bug, still operate in most states.



There were brighter spots in the 1966 fur market, though, as prices were generally higher than they had been for 20 years. Increases were posted for muskrats, 'coons, fox and beavers—and even the woolly fur of the lowly 'possum moved up a notch or so. Increases for bobcat and coyote furs were substantial. Surprisingly though, the usually dependable mink took a nose dive.

Local fur buyers operate in most states, particularly the better fur-producing ones. Many trappers market their catches through these buyers. Others ship to the large fur houses that advertise in trapping journals.

The sportsman, interested in stringing out a few traps, will likely find it easy to locate prime territory.

Most farmers welcome trappers as an excess of fur bearers can become a nuisance. Beavers dam small streams and flood pastures; fox, minks and weasels raid poultry flocks; and muskrats and 'coons destroy corn and other growing crops. However, the farm country trapper should satisfy himself that his traps do not endanger the farmer's domestic animals.

The sportsman whose club controls hunting and fishing



Making cubbyhole set at base of a tree.

territory will probably find that he has little competition for the trapping rights. Trapping operations should not conflict with the busier hunting seasons, however.

Good trapping territory is close to the vast majority of American outdoorsmen. Even those living in the major cities can find good areas nearby.

Streams—small or large—lakes, ponds, or marshes are ideal for muskrats, minks, beavers, 'coons and otters. While water is not as important to bobcats, weasels, and foxes, these fur bearers may also be caught along the waterways. The wise trappers will normally scout streams and lakes for fur sign.

Trapping seasons are long, extending over three months on some species, and in some instances there are no closed seasons. Nationwide, seasons may open as early as October and run well into April.

From a practical standpoint, the sportsman trapper is governed by other considerations as well as state regulations.

Trapping seasons overlap both hunting and fishing months, and the sportsman will not likely want the responsibility of



Fur is prime during coldest months, which happen to coincide with the lull between Virginia's hunting and fishing seasons.

a trapline when the fishing or hunting is hot.

Another consideration is the wisdom of stringing out a line of traps during the peak of a hunting season. Hunting dogs are attracted to sets made for fur bearers, and may get caught. A strange and thoroughly frightened little hound clamped in a steel trap is a tough customer, not to mention the damage it may do to him physically and emotionally.

The season of the year that fur is at its prime is of utmost importance. While trapping seasons may be long, furs taken early and late are likely to be graded down because of the lower quality of the pelts. Normally furs taken during the coldest months are prime and bring the best prices. I experience this here in Virginia. Hunting ends early in February, but the trapping season extends into March. I do my trapping during this slack period, but find that many of my pelts are graded "springy."

Most states require a trapping license. By way of illustration, a Virginia resident trapper pays \$7.50 for a state license or \$3 for a county one, and a Colorado license runs

(Continued on page 20)

This fine mink ran into a blind set at the mouth of tiny stream tributary.





# Trout in the Fall

By OZZIE WORLEY  
*Roanoke*

A HUNTER plodding along the road paralleling Botetourt County's Jennings Creek spotted something that halted him in his tracks. He rubbed his eyes and took a second look. Was he seeing things, or was that really a fisherman down there on the creek?

Fascinated, the hunter watched as the man in the creek let his line run through a pool, retrieved and cast upstream.

"What nit-wit would be trout fishing in November when everybody knows this stream hasn't been stocked since late spring?" the hunter thought to himself.

He started to resume his walk, but thought better of it and continued to stare at the fisherman. The hunter was rewarded. The angler soon had a rainbow trout flopping in the sand beside the hole.

What the hunter didn't know was that Jennings Creek was one of approximately 35 streams across Virginia's trout country that shared in something new in late October and early November. About 45,000 trout were stocked in the streams—the first time ever that these fish have been released so far into the year. This is a new policy of the Game Commission's Fish Division, and one that it quite likely will follow in the future.

For several years, the trout season has remained open until December 31, but few anglers had bothered to fish for them late in the season. The main reason was that there were few trout left.

Larry Rogers of Roanoke has just put his first trout on the stringer while fishing Jennings Creek, October 31.



Fishermen who ventured out in November, like the man on Jennings spotted by the hunter, generally found the streams in as good condition as in the spring—traditional opening time in the state.

There were some side benefits, too. The woods were dressed up in their fiery autumnal colors. The trout were



Fishing party from Natural Bridge tries fast-running water. Mrs. J. Leslie McDaniel (nearest camera) and Mrs. Roy B. Wright are in the right foreground. Mr. McDaniel is fishing from the rock on the left. Mrs. McDaniel had them all beaten at the time—with two rainbows.

full of zest. And there wasn't as much competition from other fishermen.

Still another plus: The small game hunting season opened November 6 in most of the western counties where trout were freed, meaning that outdoorsmen had a 2-in-1 opportunity if they desired, since some waters were stocked up to November 3.

The creeks and rivers sharing the late-season trout were Tinker Creek in Roanoke City, Roanoke River in both Roanoke and Montgomery Counties, Jennings in Botetourt, Dan River in Patrick, Smith River in Henry, Bullpasture River in Highland and Bath, Jackson River in Highland and Bath, Elk Creek in Grayson, Cripple Creek in Wythe, Wolf Creek in both Bland and Tazewell, Staley's Creek in Smyth, south fork of Holston River in Smyth, Big Reed Island Creek in Carroll.

Also, west fork of Little River in Floyd, South River in Greene, Hughes River in Madison, north fork of the Thornton River in Rappahannock, Big Stony Creek in Shenandoah, Gooney Run in Warren, north and south forks of Moorman's River in Albemarle, Hawksbill Creek in Page, Hardy's Creek in Lee, Whitetop Laurel in Washington, Big Cedar Creek in Russell.

Also, Silver Lake in Rockingham, north fork of the Shenandoah River in Rockingham, Potts Creek in Craig, Big Stony Creek in Giles, Jackson River (Gathright property)



in Alleghany, Cedar Creek in both Shenandoah and Frederick, South River in Rockbridge, Tye River in Nelson and south fork of Piney River and Piney River proper in Amherst.

Once the trout were dumped from the hatchery trucks, anglers were permitted to go into action. But in only a few instances did "truck followers" converge on the newly-stocked waters to rake out most of the fish.

In some streams, such as Craig's Potts Creek and Highland's Jackson River, fine strings were being landed many days after the stockings.

The mode of dress was somewhat different from that of troutermen in the spring. Most had to bundle up in heavy jackets, sweaters and wool pants. They found these garments necessary, what with the thermometer hovering in the 20's in the early mornings in many of the mountain counties.

The reception of the late stockings was enthusiastic. The case of a retired Salem man who went after trout in Roanoke River for his very first time illustrates this.

This man tagged along with a neighbor, who was an old hand at trout fishing. The neighbor caught his limit of eight, but the newcomer didn't fare so well.

He felt that his lack of success was because he had no waders—and had to fish from the bank. The first thing he did upon returning home was to buy a pair of boots.

The next morning he and the neighbor were back on the river again.

The retired man had barely stepped into the cold water in his spanking new boots before he slipped and fell. Water oozed into his boots. His companion, fearing that his friend might catch cold, offered to take him home and he accepted.

"I'll be able to keep up with you tomorrow," promised the retired man.

Mrs. J. Leslie McDaniel, bundled against the autumn cold, admires one of her rainbows as Mrs. Roy B. Wright looks on.



## WE MUST MAKE CONSERVATION REAL

### Part Two

By CARSTEN AHRENS  
*Pittsburgh, Pennsylvania*

"TEACH conservation? Don't ask me to teach anything else. I don't have time enough now to complete what I'm supposed to teach!"

That's probably true. In some systems the typical teacher has so many clerical duties to perform, there's little time left for instruction. Each year the new textbooks seem more crowded with information; they're longer, thicker, heavier.

But yesterday a record was made never before equaled in the earth's history: 200,000 babies were born! The record will be broken tomorrow. That means each week a population equal to that of Cleveland is added to Old Mother Earth's brood. The people on this planet are reproducing faster than ever before in history.

Somehow our schools have to make the present and the oncoming thousands of youngsters aware of the necessity of conservation. They must know the preciousness of pure water and air, deep soil, minerals, plants, and animals. Every teacher, no matter what he teaches, must become a teacher of conservation. "The wise use and management of our natural resources to serve the greatest number of people for the greatest period of time" should be driven home on every possible occasion. Every teacher—even though it's only through the wise use of electricity, textbooks, and supplies in the classroom—should bring to his pupils the realization that the God-given plenty of America is not inexhaustible.

Probably no one can help this program as much as an interested school principal. By his enthusiasm he determines the emphasis given to the work in his school. It may be the three R's, or music, art, home economics, shop courses, even athletics. If the principal is not alert to the need of conservation education, the progress of the most zealous teacher will be hampered. He'll determine, for example, means of making field trips possible and convincing all of the teachers of the importance of educating journeys beyond the school yard.

Teaching conservation needs field trips to see natural conditions at their best and to see other places at their man-conditioned worst. One field trip could begin the making of a conservationist. It did of me. Our class visited a farm.

Joe Kelly had been a mechanic who wearied of city life. A few years before our visit, he had bought a run-down, gullied farm, called in the Soil Conservation Service of the U. S. Dept. of Agriculture for free advice, and an amazing transformation resulted. One ancient gully—chin deep—had been not only filled in but now it was even higher than it was before erosion had V'd it. The gully began on the steep hillside above Kelly's farm. He caught the silt as it washed down and held it in place largely by repeatedly planting grass strips. It seemed to border on the miraculous. With the S.C.S.'s know-power and Kelly's go-power, the gullies are disappearing. But it isn't magic. It represents much planning and work, and has resulted in a healthy farm that many of the owners of sick acres of the surrounding area are trying to emulate.

(Continued on page 19)



## COMMISSION-OWNED LAKES:

# Fluvanna- Ruritan Lake

By H. L. GILLAM  
Information Officer

**F**LUVANNA-Ruritan Lake, located in western Fluvanna County, is one of the Commission's more manageable lakes and a good producer for the fisherman. The 70-acre impoundment was completed in 1956 and was drained and restocked in 1964 when a bottom draw outlet was installed. The lake is reached via Routes 660 and 619 from Route 53 west of Palmyra. It is located not far from the Commission's boat launching ramp on the Rivanna River at Palmyra.

The clear waters of the lake range to a depth of 30 feet near the dam. Hardwood forest borders the lake on the south while cleared farmland makes up the bulk of the north shoreline. Facilities include a graveled parking area and a ramp for launching small boats. There are no boats for rent at the lake, and the closest source of fishing supplies is Palmyra.

Bass, bluegills and crappie are the predominant species in the lake. Channel cats have also been introduced. Crappie fishing hits its peak in April and May while May, June and July offer the best bass and bluegill action. Carp fishing is good in July and August. Persons interested in cold weather excitement can try for suckers in the upper end of the lake when they congregate to spawn in March and April.

Fisherman density is low enough that the angler can expect plenty of elbow room. The peak of the summer may see as many as 20 anglers trying their luck in the lake's productive waters. A special 12-inch minimum size limit on bass protects these predators until they can effectively control panfish populations and until they provide a nice trophy for the angler.



Two fly-rod fanciers discuss the nice string of bluegills their fly-casting efforts produced. The 12-inch minimum size limit on bass is primarily to make the lake produce large bluegills.



This handsome lake located in the Blue Ridge foothills is one of the Commission's better producers. Although there are no boats for rent, there is a ramp for launching your own.



# VIRGINIA WILDLIFE

# CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

\$28,415 OFFERED IN SETTLEMENT FOR DAMAGES ON CLINCH RIVER. The Virginia Commission of Game and Inland Fisheries and the State Water Control Board have accepted \$28,415 from Appalachian Power Company as full settlement for damages to aquatic life on the Clinch River as a result of wastes which escaped from their Carbo Generating Plant late last spring. The failure of a dam on a settling basin at the plant allowed a high concentration of poisonous coal ash to course down some 60 miles of the Clinch River in Virginia and a considerable distance into Tennessee destroying almost all fish life in the river. To date, the Commission of Game and Inland Fisheries has restocked 2,387 game fish, including 1,600 muskellunge, in the affected portion plus 50,000 channel catfish. Additional stocking is planned as the capability of the stream to support fish life improves and the fish for restocking become available.

The money represents the calculated replacement value of the fish destroyed and will be deposited in the Game Protection Fund to reimburse the Game Commission for the cost of this replacement. The settlement figure was arrived at during voluntary negotiations between the Appalachian Power Company and the two state agencies involved and was not taken to court.

ARCHERS SCORE ON SPECIAL EARLY HUNTS. Archers managed to bag 7 sika deer and 39 whitetails on special hunts scheduled on federal waterfowl refuges in Virginia. A four-day hunt on Chincoteague October 11-14 netted 7 sika deer for the 70-plus archers participating. The bowhunters collectively spent 1,536 hours stalking the small Asian deer. Over 230 gun hunters bagged 32 sikas on a subsequent 2-day hunt October 20 and 21. Both of these hunts on the Chincoteague National Wildlife Refuge were open to all comers who had the proper hunting license and big game stamp.

On Presquile National Wildlife Refuge near Hopewell about 150 individual archers with special permits obtained in advance harvested 39 whitetails during 6 days of hunting in the early part of the bow season. On the first day, October 19, 70 hunters downed 25 deer for a phenomenal success ratio of 30%. By the second day the deer were wiser and only 5 fell to the hunters' arrows.

116,500 RAINBOWS SCHEDULED FOR LAKE STOCKING. In late December some 116,500 seven-inch rainbow trout were stocked in 7 Virginia lakes as part of the Virginia Commission of Game and Inland Fisheries' regular reservoir trout program. South Holston Reservoir, which lies partly in Washington County, earlier received 15,000 rainbows stocked by the Tennessee Game and Fish Commission, and the Virginia Commission released a like amount in the Virginia portion of the 7,580-acre lake.

Smith Mountain Lake received 40,000 rainbows. Philpott Reservoir, the first to receive trout under the program in 1960, was allotted 28,000 of the trout. Some 64,000 rainbows went into Carvins Cove Reservoir near Roanoke, a proven producer. Flanagan Reservoir in Dickenson County received 10,000, the second such planting for this new lake. An additional 1,600 were released in Gatewood Reservoir, and 500 were placed in Commission-owned Scott-Wise Lake.

These fish are what might be termed "insurance trout." They are an excess held at the hatchery until the trout which will be stocked as catchables in the spring are past the stage where heavy mortality could reduce their numbers to a level that would make insufficient fish available for spring stocking. Getting them out of the hatcheries and into the lake at this time of the year makes space available for the remaining fish to grow to acceptable size for spring stocking. In the lakes these fingerlings nearly double their size by the next angling season, and a few survive the onslaught of baited hooks to become trophy trout.



Firing muzzle-loading firearms is a growing pastime.

**T**HE sport of shooting muzzle-loading firearms, those frontier guns which helped chase off Indians and fill the cooking pots of yesteryear, is a growing pastime in this country.

Many thousands of old flintlock and percussion rifles, all with an air of romantic appeal, are now in active use on the target range and hunting field. Others grace the fireplace of numerous homes.

The modern rebirth of interest in the old guns came just in time too. Such firearms were getting scarce, and the old-timers who knew their capabilities, proper use, and how to restore a rusty bore to something approaching its original accuracy were thinning out fast.

The revival of target matches for muzzle-loading rifles started in Ohio and Indiana some 20 years ago and has spread with enthusiasm into many areas including Virginia.

The sport of muzzle-loading target shooting got started in western Virginia in 1950. The town of Tazewell was celebrating its centennial then, and the planners of the event thought there should be an old-time muzzle-loading turkey shoot.

This special event grew into regular shoots and even muzzle-loading clubs, due greatly to the efforts of Roy W. Peery, who operated a country store outside Tazewell. Two clubs were organized: The Witten Fort Long Rifle Club and the Battle Knob Muzzle Loaders. Although Mr. Peery, who was born in 1889, died in 1965, both clubs are still active in the Tazewell area.

Typical shooters include old-timer Jeff Higginbotham, a Tazewell farmer, who fires a .48 caliber rifle with a stock made of curly maple.

"It was made by Timothy Vogler about 1840 to 1850 in what is now Winston-Salem, North Carolina. I traded a dog for it years ago," Higginbotham explains.

It's not likely that you could make such a trade nowadays. Old guns that sold for a few dollars 20 years ago will cost from several hundred to several thousand dollars nowadays.

For this reason, many of the muzzle-loading firearms in use today are reproductions made by modern gunsmiths. Old guns must be carefully renovated before they are ready for firing.

Another shooter is Andy Witten, of Tazewell. A tall, slim fellow, Witten is a descendant of Indian Scout James Witten.

Watch him fire and you will see him carefully sight down the long barrel of his old gun, take a lengthy aim, then slowly squeeze the trigger. There is a resonant, rolling ka-boooooom, and cloud of grey smoke and likely a bull's-eye.

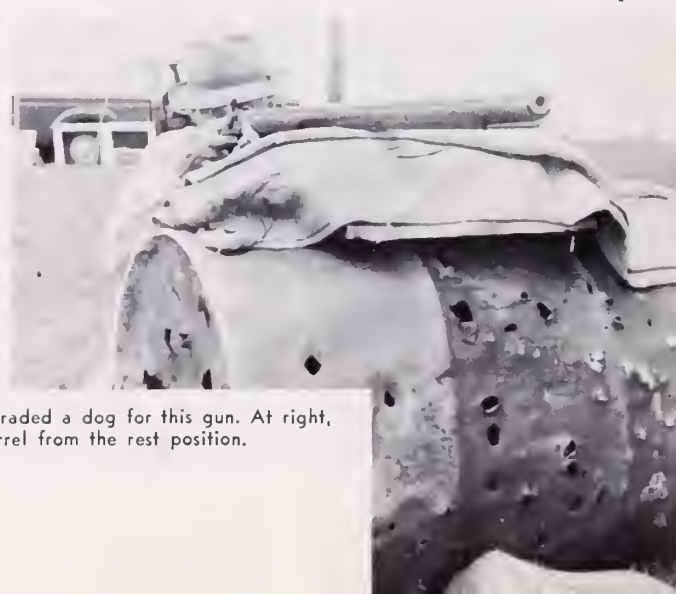
Frances Harman, of Radford, shoots a .30 caliber squirrel

## Modern Sport Muzzle Loadi

By BILL COCHRAN  
Roanoke



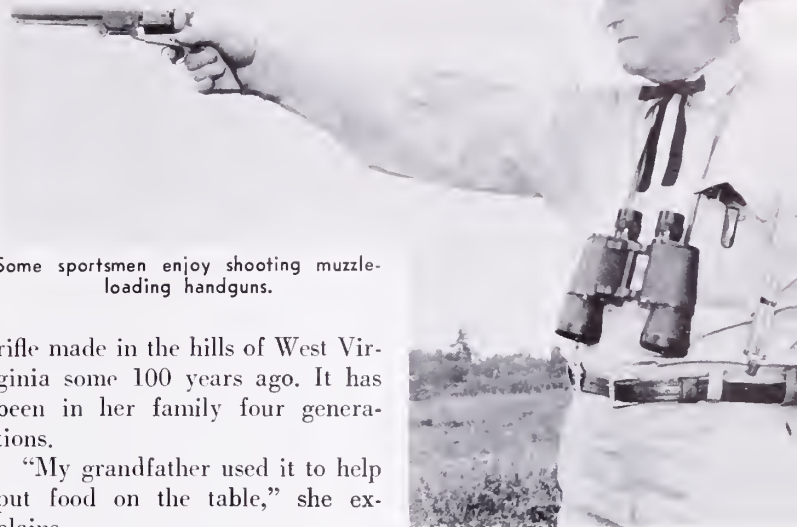
Tazewell farmer Jeff Higginbotham traded a dog for this gun. At right, he sights down the long barrel from the rest position.







At 50 yards, muzzle-loader can accurately hit the bulls-eye (at least stay in the black).



Some sportsmen enjoy shooting muzzle-loading handguns.

rifle made in the hills of West Virginia some 100 years ago. It has been in her family four generations.

"My grandfather used it to help put food on the table," she explains.

Mrs. Harman is the wife of S. L. Harman who helped in the planning of the Tazewell centennial turkey shoot back in 1950. He is a national gun trader and muzzle-loading enthusiast.

Most active muzzle-loaders not only belong to local clubs, but also to a national organization called the National Muzzle Loading Rifle Association with headquarters in Shelbyville, Indiana. The sport has grown most rapidly in Ohio, Indiana, California, Michigan, and New York.

Some shooters have gone into real precision firing. They have developed huge muzzle-loading rifles weighing 20 to 30 pounds in order to attain greater accuracy target shooting from a rest. Many have been fitted with modern peep sights.

A number of muzzle-loaders frown on such doings, preferring to keep their guns and shooting as close to original methods as possible. The Battle Knob Muzzle Loaders are among this group.

Most muzzle-loading rifles in use today are of the percussion type. There are still a few flintlock guns around, the forerunner of the percussion guns. (Continued on next page)



Precision shooters have made rifles, such as the one above, weighing as much as 30 pounds. At left, Mrs. S. L. Harman fires .30 caliber muzzle-loading squirrel made over 100 years ago.



## Muzzle Loading (Continued from page 15)

The flintlock, which came out about 1640, was a big improvement in firearms. It greatly simplified shooting.

The lock functioned by forcing a piece of flint, set in vise-like jaws, to stroke serrated steel and shower sparks into a flashpan to ignite the priming powder.

So rugged and trouble-free was it that it drove other firing mechanisms from the field and was chief lock for a century and a half—until the introduction of percussion firing.

The invention of the percussion cap was almost as important as the invention of gunpowder. It was the ancestor of the modern centerfire primer.

Composed of a mixture of powder, the cap was placed on a nipple. When the trigger hammer struck it, the force detonated it causing a jet of flame to be channeled into the powder charge, which, in turn, exploded it.

Caplocks rapidly replaced flintlocks. In fact, gunsmiths converted many flintlocks to use caps. For this reason, flintlocks are quite scarce today.

Percussion cap muzzle-loaders occupied a brief, but important, period from about 1840-1880, bridging the gap between the end of the flintlock era and the development of the cartridge.

Watch a muzzle-loading match, and you can see that considerable time and effort, as well as skill, goes into the shooting.

First, the bore is wiped out carefully with a ramrod. Then the shooter puts the butt of the gun on the ground and pours the correct amount of powder down the muzzle. Only black powder is used. Sometimes a colorful frontier-type powder horn is used, but many shooters now prefer small plastic vials with the load carefully measured. This is quicker and more accurate.

Loading the proper amount of powder is important to accuracy since each gun reacts differently. If a rifle does not shoot accurately, the powder charge is varied until the precise amount for best accuracy is obtained.

Next, a patch, cut from a piece of cloth damp with saliva, is fitted over the bore about the diameter of the barrel. A ball (bullet) is placed on the patch, seated with a ball seater and rammed down the barrel with a ramrod.

The patch was an important American contribution to the history of muzzle-loading. To patch load a rifle, you use a ball bullet three-hundredths of an inch smaller than the actual caliber of the gun. In loading, the patch is placed under the ball, held over the muzzle then is driven down the barrel.

Frontiersmen used a piece of dressed buckskin or a bit of old felt well greased with tallow. Modern shooters prefer to wet their patch with saliva.

The patch does several things. It makes the ball slide down



S. L. Harman helped organize muzzle-loading shooting in western Virginia.

the barrel more easily, without a lot of noisy hammering. More important, the grooves of the rifle cut into the patch thus making a gas-tight seal. Then too, the patch helps spin the ball out for more accuracy. Finally, it also aids in keeping the barrel clean.

How accurate are muzzle-loaders? Legend would have us believe that every frontiersman was a crack shot, capable of shooting the eye out of the wind. A few modern men who have tried shooting muzzle-loading guns have found them difficult to master and have concluded you can't hit the side of a barn with one.

Their accuracy ranges somewhere between these two extremes. At 50 yards, five shot groups can be placed in a two inch, and often one inch, group by a good shot on a calm day.

At longer ranges, an exacting degree of judgment is necessary to determine what effect the wind will have on your shot. At 200 yards, a marksman with a good rifle will keep his shots inside a ten-inch spread, but hardly a breath of air must be stirring, so sensitive is the round ball at this range.

One thing for certain, there is an atmosphere of friendly informality at muzzle-loading shooting matches. It takes time to load these guns; therefore, there is time for plenty of fellowship and relaxation between the resonant, rolling ka-booooooms.

Andy Witten wets patch, trims it over the bore of his weapon, rams it and the ball down the barrel, takes up prone position and fires, producing a cloud of pungent smoke and a resonant, rolling ka-boooooom that is tossed back and forth by surrounding hills.





## We Must Make Conservation Real

(Continued from page 11)

But seeing and understanding aren't enough. The field trip is just the stimulus. There must be follow-up. Something must be done about it; it's the doing that's important. Conservation ceases to be just a big word when the youngsters plant a hundred young trees, seed a lawn, get cover started on an eroded slope, build and erect bird houses, maintain feeding stations, construct and stick to trails, or stop a gully.

So convince your principal that conservation can't be taught by spending all the time in the classroom. Children must become acquainted with nature's way of doing things. They are so cognizant of the man-made, the very excellent, utilitarian machines and gadgets that govern so much of their push-button lives. And after the stimulus of the field trip and the pupil-accomplished projects that resulted from the experience, the principal will become the spark plug for this type of education.

Some of our children have always lived by junk-filled waters; they don't know that singing, crystal-clear brooks exist. Recently a principal showed me a tragic little stream that oozed down through a section of his city. The water course is so evilly polluted, strewn with the impedimenta of our civilization; it is such a constant menace that the city fathers are considering making it into a subterranean drainage way to the river. It probably was once as charming a brook as American brooks in times past were and some still are. It could be that way again (nature is amazingly resilient) if the will to restore it to its erstwhile condition were present. The oldsters will never do it. But the oncoming generations won't do it either unless they can get a vision of what the stream once was like and be inspired to restore it to its former state.

Many school systems in the United States are including in their primary program what might be considered an extended field trip: a camping experience for each child. Usually this is a sixth-grade program, for many child authorities believe that children of this age are especially receptive to the tenets of conservation. They are taken from the city for a day, a weekend, a week or longer for a more primitive life in the out-of-doors. These excursions are generally planned for late spring, summer, or early fall.

Teaching conservation isn't like the teaching of mathematics, or the rules of grammar or spelling. It is not something learned by rote. It isn't going to be taught by a teaching machine. It is cultivating the spirit as well as the mind. It calls for something akin to evangelism.

There must be lyrics mixed with the facts, inspiration blended with the commonplace, songbooks and sermonettes tucked in with notebooks, textbooks, workbooks, graphs, and maps. For conservation, like so many abstractions—honesty, dependability, patriotism—is more often caught than taught.

It was my good fortune as a child to go on a series of field trips with a man and his wife who were fired with a zeal for every wild thing in one of our national forests. They loved every cliff and waterfall, the trilliums and hepaticas, the sweet gums and tulip trees, the warblers and chipmunks along the paths. They didn't stress scientific names (though we learned a lot of them) nor bemoan the tons of topsoil washed down watersheds. Let's make the place we visit a better one was their motto.

So we repaired trails, renovated springs, trimmed out diseased limbs, transplanted, halted erosion, but learned at the same time to recognize bird calls, plants, fossils, minerals, amphibians, reptiles, and insects. There was also time for picnics, cliff and tree climbing, and harmonizing around a campfire.

We gained an understanding of the balance of nature and a realization that some thoughtless act on the part of man can completely unbalance things. There have been so many costly mistakes with far-reaching effects in man's relations with wildlife, and each tragic error underlines the need of everyone's gaining a greater appreciation of the living things about us and of man's dependence on them.

And so we learned how the destruction of forests in the headwaters of a great river might bring about floods hundreds of miles downstream. The plowing of prairies could bring dust storms to pollute the air a thousand miles away. One farmer's indifference to sheet erosion would change the color of a stream and the kinds of life it supported. How extensive use of certain insecticides could destroy the beneficial as well as the harmful insects, the birds that eat insects, to start a chain of destruction that could be more costly than the original infestation. How the thought-

less introduction of an exotic species like the gypsy moth into New England, rabbits into Australia, the Scotch thistle into Canada, or the English sparrow or the starling to all of us could bring on unexpected and unwanted results.

We were not too young to understand a harvest is available, even necessary of many renewable resources. This was subtly pointed out. For example, hunting seasons are necessary to prevent deer herds from becoming too numerous, for then starvation results. Timber should become lumber when trees are mature. That only God can make a tree is true, but when that tree is ripe, it should be cut and room made for others. Sentimentality has no place in the program.

Someone has defined civilization as a race between education and catastrophe. To preserve that civilization our teachers each year have an ever increasing, awesome responsibility because the world is growing increasingly crowded. The worth of every natural resource must be re-evaluated and its worth instilled into the thinking of every child. To a wise teacher, soil isn't just something dirty dragged into the school room on some untidy pupil's shoes. It becomes the most precious stuff on the planet!



Conservation can't be taught entirely within the classroom. Field trips help children become acquainted with nature's way of doing things.

## The Common Crow -- Some Vital Statistics

By

GLENN R. DUDDERAR, JEFFREY C. HANSON,  
and DWIGHT R. CHAMBERLAIN

*Virginia Tech Student Chapter of the Wildlife Society*

**A**NIMAL populations are always changing. Their compositions are continually altered by births, deaths, and movements. Before we can understand the changes within populations, we must be able to measure their important features. *Population analysis* is a technique for calculating vital statistics and drawing conclusions regarding the changes within populations.

The Virginia Tech Student Chapter of the Wildlife Society conducted winter crow roost shoots between December, 1964, and February, 1967. These hunts were held at nocturnal rookeries between Staunton and Floyd, Virginia. The Chapter's aim was to collect common crows for population analysis. In addition, crow counts by Virginia bird and nature clubs were considered in the final appraisal of population fluctuation.

Crows were aged by noting depletion of mouth pigment per year. The immature's noticeable red palate turns dark gray after three years. Age determination in the common crow can also be determined by feather shape, wear, and pigmentation. Sex was determined by examination of the gonads. The results for 217 crows collected with shotguns using crow calls and mounted great horned owls as attractants follow:

$$\frac{\text{No. immatures}}{\text{Total population}} = 56\% \quad \frac{\text{No. males}}{\text{No. females}} = .78$$
$$\frac{\text{No. immatures}}{\text{No. adult females}} = 2.30$$

Fifty-six percent of the total sample was composed of immatures, a condition that generally indicates a stable or slightly expanding population.

There were more females than males in the sample. This unusual ratio for a monogamous species is the result of differential migration by sex, and/or a higher male mortality.

There are three probable sources of error in our calculations:

1. A strong possibility of differential migration by age and/or sex exists among crows wintering in Virginia.
2. Our data may be biased in favor of over-collection of immature crows. It is well known that juvenile and inexperienced crows are more readily lured to calls and decoys than are adult and experienced birds.
3. One sample of 217 crows is statistically insufficient. Imber and McMurray (1939) conducted a sex ratio and weight study of wintering crows in Oklahoma. Of 1,000 birds sexed, 526 were males and 474 were females, but the number of males in each group of 100 crows varied from 41 to 65 and the females from 35 to 59. It is evident that a sample such as ours is not sufficient to determine sex ratio precisely. These workers believe that a minimum of 1,000 birds are necessary for a precise sex ratio study.

Although biased and inadequate, our data suggests a *slightly expanding* winter crow population. This hypothesis is substantiated by annual crow counts, conducted by nature clubs and the Virginia Society of Ornithology, and we believe that the common crow population is increasing slightly in southwestern Virginia and perhaps statewide.

## Day at Pocahontas

(Continued from page 6)

was off or, as the fellows in the other blind told us, it was back to normal and we did not bag any of them. Around 9:00 a.m. the geese started moving back to the Bay from the fields. Soon we saw a group of three birds headed in our general direction. Sonny told us to get down, and he would try to call them in range. He began honking and making other noises that sounded very much like he might choke to death, but evidently it was the right thing. These geese cut at right angles when they were opposite us and set their wings and began to glide down to the decoys. Just as they were extending their legs we jumped up and opened fire. One fell and the other two began to rise rapidly. Just as these birds were about to get out of range down one came with a broken wing. Sonny finally was able to retrieve this bird after at least a half-mile chase by boat.

By eleven o'clock we had two geese and four ducks, so we decided to come in for lunch. Sonny loaded us in the guide boat and took us by to see our friends in the other blind. They had their limit of ducks but no geese. We talked them into going in for lunch with us. After we docked, we took our sandwiches and thermos of coffee into the headquarters and ate in front of the open fire. As we were finishing up Mr. Waterfield came in and told us that we could go back to our blind whenever we wanted to, but he suggested that we stay by the fire awhile as the action was usually pretty slow in the middle of the day. This was all the excuse we needed, and within five minutes we were all catnapping in front of the fire.

Around 2:00 o'clock our guides came in and suggested that if we wanted to hunt some more we had better get moving. Back to the blinds we went, and by this time it was obvious that Mr. Waterfield was running true to form as a weather prophet. There had been a wind shift as predicted, but instead of snow it was clearing and turning warm.

Harold and I had some long shots at ducks during the afternoon but were only able to bring down one bird. Just before quitting time we saw a flight of six to eight geese set their wings and head for the blind in Johnson Island Bend. There was a crackle of gunfire, and we saw the geese flare and gain altitude. We couldn't tell if they had dropped any, but knowing what a deadeye Herb was we felt sure they hadn't been skunked.

It was time to take up and go in. Sonny would not let us help him take up the decoys, as he said we would just be in the way. Within a half hour after sunset we were headed for the landing. Strings of swans and snow geese could be seen flying against the fading sunset. It really was a beautiful sight to end a good day of shooting.

When we reached the landing we were met by Mr. Halstead, who checked our bag and recorded number and species of birds killed. Our companions had dropped two geese out of the only flight they had. This gave the four of us a total kill of four geese and eleven ducks out of a possible eight geese and twelve ducks.

Of the eleven ducks killed there were six species: widgeon, mallard, black duck, ringneck, canvasback and green-winged teal. Halstead told us that this made up over half of the ten species of ducks that are regularly killed on the area.

We loaded our gear, paid our guides, told all of the area personnel good-bye, and headed for home. On the way home there was a lot of talk about the hunt in general and about the area and the facilities available. We decided that we had had a real good trip and that we would try it again next year.



wild duck. If all else fails, you can always skin the goose, and some people advocate this in any case. Personally I think it detracts greatly from the finished product, and always avoid it if possible. When it really cannot be avoided, I invariably bone and roll the goose or cook it by some method other than roasting. These are manifold.

The breast of even an eight-pound gosling should be larded, and the most satisfactory way to do this without impairing the flavor is to use butter rather than the bacon or salt pork that seems to have become synonymous with the very term "larding." Butter, while it has a distinct flavor of its own, has the virtue of enhancing, rather than subduing or overpowering, other flavors. It acts in the nature of a catalyst, bringing out all the natural goodness and flavor of the flesh, whereas something with a more strongly defined flavor, such as the smoked bacon or salt pork already mentioned, tends to impart that flavor to the flesh. In some cases this can be desirable. The secret is in knowing WHEN, and this comes partly from your knowledge of the raw product, partly from intuition and mainly from experimentation to determine personal preference. For the novice, it is much safer and wiser to stick to butter.

To lard the breast of a goose, use thoroughly cold butter. Slice it into slabs, and carefully insert it under the breast skin. Work from the loose skin of the cut made for cleaning the bird, and make certain that you do not tear the skin, or pull away from the flesh any more of the skin than is necessary to insert the butter. This prevents losing the butter into the dripping pan during cooking, and keeps it on the breast meat where it will be absorbed. Always bear in mind that wild game has far less fat than its domestic counterpart, and that fat is one of the best tenderizing agents.

This done, you must rub the inside of the cavity with salt—tenderizer salt if you want to take every possible precaution against toughness. Use only ordinary table salt on the outer skin. Now you are ready to stuff the goose.

For myself, I prefer a very simple stuffing, somewhat tart and fruity with a mildly piquant flavor, yet with just a touch of sweetness. Perhaps this is my German stepfather's influence. He thought, and I agree, that the ideal combination to achieve this objective should be a combination of apples, mild onions and raisins.

Use no liquid in this stuffing. Even the butter in which you will sauté the 1 or 2 chopped mild onions and then toss the peeled, cored and quartered tart apples until they begin to appear transparent around the edges, should be carefully drained off before adding the handful of plumped raisins—dark or light seedless raisins—and spooning this mixture into the cavity. Truss with great care, and set in an open roasting pan, on a rack. Brush the goose all over on the outside with melted butter, and set it in an oven preheated to at least 400 degrees. During the roasting process, enough liquid will be available in the pan for basting from the butter you have used and from the natural juices of the goose.

I am not going to give you firm directions for length of cooking. If you want it slightly rare, as I think all wild game should be, then cook it at high heat for a short time, basting every 5 or 10 minutes. If you prefer goose, as many people do, cooked all the way through, then reduce the oven heat after the initial browning, to about 350 or 375 degrees and cook it until it suits the taste of your family.

However you do it, when the goose is ready to serve, re-

move the stuffing to a separate dish and blend into it an ounce or two of Calvados or, failing that, a fine domestic "Apple Jack."

To the basting juices left in the pan, add a small quantity of flour and stir smooth, cooking over gentle heat until the flour is cooked and very lightly browned. Try to keep it as light as possible—as though you were making a white roux. When ready to go to the table, blend in about a cup—maybe a little less—of thick, commercial sour cream. Let this come to the boil but not beyond it. Pour into a scalded sauce boat, sprinkle a few chopped chives, fresh dill or parsley and serve piping hot.

Goose will accept fairly strong vegetables, so this is one time you can serve a purée of those wonderful yellow turnips with perfect confidence. Brussels sprouts and boiled chestnuts is another go-together; and of course you will want something to enjoy with all that lovely sauce you just made, so you will want wild rice or the packaged quick-cooking blend of long grain and wild rice that I have so often recommended with game.

You may want a nice competent wine to set off the rest of the goodies, and I suggest a full-bodied Burgundy or Bordeaux, but there is no reason not to serve a Rhine if you like it as well as we do.

The best salad is one that makes use of some of the sturdier, somewhat "bitter" greens that are available in quantity and in prime condition at this season. Chicory, escarole and Belgian endive are all good thoughts, either alone or in combination. The dressing should be oil and vinegar with sparing use of salt and a few twists of the pepper mill. The vinegar, of course, should reflect the wine served with the food.

Goose liver, as I mentioned earlier, is a great delicacy, and should be treasured. After you have collected about two cupfuls in your freezer, you can concoct a goose liver pâté that will provide a most deliciously disarming first course for a special occasion dinner. It is a bit of trouble, but the result is well worth the effort.

To do it, chop the livers into small pieces so that they will cook through very quickly in butter over low heat that is nowhere nearly hot enough to brown them. One or two very mild green onions, or better yet, shallots, should be minced and cooked along with the liver bits. Put the whole thing through a food mill or fine sieve, blend in enough softened butter to make a soft paste, and add at least one canned, chopped truffle. The white ones are best if you can get them.

Line your prettiest mold with a mild aspic or a jellied madrilene, and when this is firm enough so that it will not collapse into the bottom of the mold when you start working with it, spoon the soft pâté into the mold, pressing it down gently but firmly so that no "air bubbles" are left. Cover the top with more of the jelly you have elected to use and chill thoroughly—preferably 24 hours to "marry" the flavors. The madrilene is prettier, but the aspic is not so strong. Unmold on a lovely silver plate, surround with crisp greenery—holly can be used if it is a Christmas dinner—and serve it with rye crackers or very thin slices of buttered black bread.

There is no reason that you could not have used either an oyster, chestnut or sausage stuffing in your goose, if your preference is for a stuffing with more body. In such a case you would probably prefer to omit the rice, and use the sauce over the stuffing. Any favorite stuffing for a domestic goose can be adapted and used successfully in a wild goose.

\$3.50. These are resident costs. Nonresident fees run considerably higher—\$50 in Virginia.

Generally, regulations require that all traps be tagged with the owner's name and address. Inexpensive tags that can be bought in bulk at any trapping supply house will do.

Many states require the trapper to obtain written permission from the landowner. Common courtesy demands this anyway.

A daily visit to traps is a common requirement. Even in the absence of such laws a trapper who finds it impossible to visit his traps each day should not put them out. Respect for the quarry dictates that trapped animals be removed as soon as possible. Ideally, traps should be visited early in the morning as most fur bearers are caught at night or early dawn, and the longer they remain in the traps the better is their chance for escape.

The well outfitted nimrod will likely find that except for a supply of steel traps, he is already equipped for a trapping adventure.

A dozen good traps are sufficient for a beginning. For most fur bearers sizes 0 to 2 will do the job, but larger

sizes will be needed if the line is laid in beaver or bobcat country. One veteran trapper recommends the following sizes:

Size 0—weasel

Size 1—muskrat and opossum

Size 1½—muskrat, mink, and skunk

Size 2—mink, skunk and raccoon

Size 3—fox

Size 4—fox, otter, and beaver

It is well to bear in mind that while the larger fur bearers can pull out of the small traps, the smaller animals cannot as easily escape the large ones. The only advantage of sizes 0 or 1 is the ease with which they can be sprung, and unless operations are limited to muskrat and opossum, sizes 1½ to 2 are a better choice. A large trap can be set almost as lightly as a small one anyway.

New traps should be boiled with evergreen foliage or walnut hulls. This removes the shiny finish as well as odors foreign to the world of wildlife.

A good sheath or pocket knife is a necessity and has many uses on a trapline. So does a small ax—handy for cutting trap stakes, chopping recesses for log or stump sets, and stapling anchor chains to logs or trees. A roll of light

The author with a gray fox that fell for a cubbyhole set.







Veteran trapper adds another muskrat to his catch. Below: If possible, water sets should be made from the stream, so man scent is carried away by the flow.

wire is needed for securing traps to rocks, tree branches or small trees, and for extensions to anchor chains. Rubber gloves keep human scent to a minimum and protect the hands when making water sets. Other accessories include pliers, nails and staples.

A basket-style pack is ideal for transporting this equipment as well as the day's catch. Carried in such a pack the various items of gear are easy to get to as needed.

I also carry a light .22 caliber rifle—for disposing of trapped animals, and collecting crows, starlings and such for trap bait.

Except for footwear, clothing boils down to a matter of personal choice and comfort. Knee-high rubber boots are a must, though. Small streams, creeks and marshes are characteristic of most trapping territory, and the boots are necessary to keep the feet dry. They are also needed when making sets in shallow water.

His equipment assembled, head filled with the latest regulations, and some good fur country staked out, the would-be trapper can still fail if he does not make the proper sets. It would be impossible to describe all of the possible sets here, but a few simple ones should put the beginner in business. A good investment for any budding trapper is a





## Fur for Fun and Finances (Continued from preceding page)

book on trapping.

If I were limited to a single set I would search a small stream and locate several tiny tributaries—often wet weather ditches or spring outlets that are just inches wide. Fur bearers that range streams explore these little tributaries for food, and a well concealed trap or two placed at the junction with the main stream is almost sure to take 'coons, muskrats and minks. The beginner should forget about bait for this type of set and rely completely upon the habits of his quarry. If possible, the chain should be anchored in the deeper water of the main stream so the trapped animal will drown.

Another simple but effective set is the cubbyhole type. Using rocks or small logs, a three-sided pen is constructed by placing them against the base of a tree or boulder. The bait is then placed in the apex and a trap concealed in the entrance. In making this set rubber gloves should be used to eliminate the possibility of leaving human scent.

Many fur bearers like to run along the trunks of fallen trees or logs left from logging operations. Where such opportunities exist it's an easy matter to chop a recess in the log or tree trunk and set a trap flush with the edge. The trap is then covered with leaves or moss.

The value of hard-earned fur can be reduced considerably if the pelts are not handled properly.

Before skinning, the fur should be clean and dry. This is the first step and a very important one as most furs are stretched on boards with the fur inside.

Once the fur is removed from the animal it should be cleaned of excess fat and slipped onto a stretcher. The experienced trapper stocks a good supply of wire or board stretchers, and if he knows generally what his line will likely produce he can keep on hand several sizes for each species. The stretcher should be the proper size—neither too small nor too large.

Fur should be cured in a cool, dry place away from the direct rays of the sun and out of reach of roaming animals. Skinning, fleshing and stretching furs is tedious, time consuming work, and if the sportsman trapper does not have time to do this properly he is better off sharing his profits with someone who has the time and know-how. A harvest of well prepared pelts is the end result of all the careful



This trapper's hands would fare better if he wore rubber trapping gloves. He is making his set in a typical muskrat bank den.

planning that goes into a trapping experience. Don't spoil it in the end.

The art of trapping is as old as civilization. From the early American colonies such as Massachusetts and Virginia where fur bearers still romp, hardy men with their traps were lured to the most remote areas of our fur-rich continent. While there was no place for mink stoles in the austere life of the pioneer lady, early American trappers found a ready market among the wealthy classes of Europe. The remains of crude line cabins mark their wilderness traplines, and the names of streams and lakes are their contribution to the history of the New World.

It's a rich heritage the American trapper passed on to the modern day outdoorsman, one he can still take advantage of—for pleasure and cash.

Beaver works. In Virginia it is unlawful to trap on, or within twenty-five feet of, a beaver lodge or dam. This makes it less likely that a trapper will inadvertently wipe out an entire colony of these relatively easy-to-take fur bearers.

Commission photos by Kesteloo







*Bird*

*of the*

*Month:*

## *Canada Goose*

By DR. J. J. MURRAY  
*Lexington*

**O**F the larger water birds one of the most familiar to bird students and one of the most eagerly sought by hunters is the Canada goose. It is wary enough to call for skill on the part of the hunter. It is large enough and tasty enough to give satisfaction at dinner. It is a fine bird, in the field or on the table.

Occurring all over Virginia in winter, it is common in Tidewater and at least fairly common elsewhere. At Lexington, for instance, it is a common visitor from early October to late November, and again from late February to early April, and occurs occasionally even in mid-winter. In most parts of the state the development of ponds and lakes has naturally led to an increase in the number of visits from these geese. Nests, probably of semi-domesticated geese, have been found at Back Bay, Newport News, Hog Island State Refuge, and other places in Virginia.

Ten varieties of Canada geese, differing somewhat in size and coloring, are recognized by ornithologists. Only a small proportion of four of these varieties breed as far south as continental United States. Practically all of our Virginia visitors belong to the variety known as the common Canada goose, *Branta canadensis canadensis*, although we do have a few Virginia specimens of three other races.

The numbers along our coast vary greatly from winter to winter. For instance, at Back Bay the count ran to 50,000 in 1950-1951, as against only 10,000 in 1946-1947, and 9,000 in 1964-1965. Valentine estimated a maximum of 2,000 at Assateague in 1955. The main flocks on the Eastern

Shore, however, are said to stay in Tangier Bay and in a private refuge at Eastville.

Few birds attract so much attention in migration time. Practically anywhere in the United States it may be seen, or more often heard, at some time during these movements. The V formation in which the birds usually fly is a striking sight. One of the strongest ganders takes the difficult lead position, each succeeding bird in the formation getting some protection from the bird ahead. Geese fly both at night and by day, stopping at times to feed.

The Canada goose is a striking bird, so well known as scarcely to need description. The general color is brownish-gray. The head and neck are black, with a white band on the throat and up behind the eyes. It has a wingspread of five feet or more. The bird is about three to three and a half feet long, much of which is neck. It varies much in weight, from 7 to 14 pounds.

The nest is built near the water, often indeed on an island. It is made of reeds and grasses, lined with the bird's own down. Usually five or six eggs are laid, though the number varies greatly. It takes about four weeks for these eggs to hatch. The male guards the nest belligerently. Woe to any intruder, however large it may be, who dares come near!

While these geese will eat a great variety of animal food, mainly insects, their dependence is on vegetable matter. Water plants and fresh shoots of grain form the chief diet.



Edited by HARRY GILLAM

### Ruritans Back Hunter Safety Program in Chesterfield



William G. Black of the Chesterfield Ruritan Club presents Coach Ryan of Fred D. Thompson Intermediate School in the county with a check to cover the expenses of the 286 students who completed the Game Commission-National Rifle Association Hunter Safety course given there. Game Warden Area Leader J. R. Bellamy and Wardens J. J. Westbrook of Henrico, R. L. Griffith of New Kent and B. L. Adams of Charles City have trained 1,124 youths in the four-county area this fall. Courses were given in 5 schools and 58 volunteer instructors were trained by the wardens to help. In the photo below, youths from Fred D. Thompson School who made perfect scores on their examination are shown with Mr. Black and Joe Bellamy, who assisted in the presentations.



### Youth Downs Big Buck



Commission photo by Kesteloo

R. W. Wood of Doswell poses with the massive rack of the buck bagged by his 15-year-old son while hunting on his father's property. The boy downed the big deer, which sported antlers with a 30-inch spread, at about 35 yards.

### Fishing Tackle, Like Cars, Needs Winterizing

"If falling leaves and drifting snow have drawn you to the reluctant conclusion that the fishing season is over, don't walk away from your tackle until you've winterized it," advises Dick Wolff, vice president of The Garcia Corporation, the nation's largest fishing tackle concern.

Wolff recommends the following three step program for winter rod care:

1. Wash the rod thoroughly with soap and water.
2. Clean and grease ferrules.
3. Apply auto wax to rod.

Inventory the lines on your reels and retire the worn lines. If one end of the line has taken all the abuse, reverse it. For reel care:

1. Release drag tension.
2. Check the operation of each reel. Now is the time to send reels to the factory for repair.

3. Cover reels with a light film of grease.

"Trying to get the tackle box in order can be a frustrating experience," points out Wolff. "But it has to be done, and it's easier than shoveling snow."

1. Pick out all lures and hooks.
2. Clean the box, using a vacuum cleaner.

3. Wipe the inside of the box with an oily rag and lubricate hinges.

4. Go through the lures and eliminate all those beyond repair and those that simply didn't catch fish. Replace the lures you lost while they're still fresh in your mind.

5. Check for broken barbs on hooks and plugs. A flat stone can be used to sharpen hook points.

6. Coat hooks with oil to prevent rust.

"Accessory equipment should receive the same care as basic tackle," Wolff explains. "Landing net fibers should be washed with a mild detergent. Boots and waders should be rolled into a compact package, wrapped in newspaper, and stored in a cool, dark area."

To complete the check, flashlight batteries should be removed to prevent cor-

rosion, the first aid kit re-equipped, and a list of tackle items needed in the spring prepared now, while you remember.

Seem like a lot of work? It is. But it's better done now than when spring waters call.

### Former Director Honored

I. T. Quinn, who served as Director of the Virginia Commission of Game and Inland Fisheries from 1946 through 1958, was awarded Honorary Membership in the Southeastern Association of Game and Fish Commissioners at a surprise ceremony during that group's meeting in New Orleans in late September. He is the first person to be so honored. During his career in the wildlife field, he served as president of the Southeastern and as president of the International Association of Game, Fish and Conservation Commissioners. The contributions he made to the field of wildlife management as one of the most able administrators of his time were cited as reasons for the presentation. Mr. Quinn now resides with his wife in Grove Hill, Alabama.

### First Northern from Orange Lake

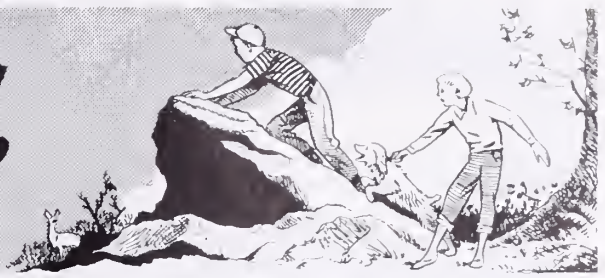


The 3.9 pound 26 1/8 inch northern pike caught by James L. Gallhugh of Orange is the first of legal size to come from this Commission-owned lake stocked in 1966. Although slow to show up in the fishery, there is reason to believe that quite a number of the original 250 planted are still in the lake.





# YOUTH AFIELD



Edited by ANN PILCHER

## September 4—Red Letter Day



Richmonders Tom and Bob Cruickshanks display their Labor Day trout catch weighing 20 pounds 4 ounces. Largest of the 12 rainbows, taken from Virginia Trout Company ponds in Monterey, weighed 3 pounds 4 ounces.

## Students Shoot for Teachers

Thirty-three boys and girls from Lovington and Fleetwood Schools in Nelson County, under the direction of Jim Moyer and Allan Sprinkle, demonstrated air rifle shooting positions, firing line techniques and procedures, and safe gun handling for some 40 physical education teachers at the District J Education Meeting held at Charlottesville's Lane High School on October 7. Virginia Game Warden Lewis Brandt talked about the importance of offering hunter safety courses in elementary and high school physical education programs.

Lewis Brandt, State Game Warden (left), and Jim Moyer, Nelson County Elementary Physical Education Supervisor, discuss gun safety with Kirk Grady, a Nelson County elementary student, at the District J Teachers Meeting.



## Wildlife Food Patch Awards

Annually, Ruritan Clubs in Zone 4 present awards to the top three Wildlife Planting Contest winners in each Shenandoah County high school. In October William H. Fadely, Zone 4 chairman, presented savings bond and cash awards to 1967 winners: Stonewall Jackson High School—Dennis Biller, first; Burton Runion, second; and Chris Neese, third. Central High School—Roger Orndorff, first; Eugene McIlwee, second; and Mike Hockman, third. Strasburg High School—grand prize—David Gnegy, first; James Pangle, second; and Dennis Palmer, third. The grand prize is a plaque which is kept one year by the winner. If won two years in succession, the plaque is given to the winner permanently.

Seed was furnished by the Virginia Commission of Game and Inland Fisheries and planting supervised by school agriculture instructors.

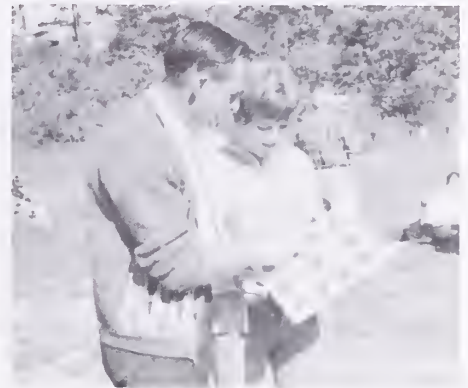
## Safety Stressed at Elkton H.S.

Wardens Ronald Wilfong and Robert Inskeep explain the workings and safety features of a shotgun during the 4-day fall hunting safety course offered at Elkton High. Warden Jesse Updike assisted with the instruction. Course materials for approximately 240 students were provided by Merck Rod & Gun and Massanutten Hunt Clubs. To be excused from school on the first day of hunting season, Elkton High students needed parents' written permission plus a hunting safety course certificate of achievement.

Elkton Valley Banner photo



## Shooter Checks Her Aim



Suffolk News-Herald photo by R. R. Hardy

Sixty-eight children completed the hunter safety course taught this fall by the Suffolk-Nansemond Chapter of the Izaak Walton League in cooperation with the Suffolk Recreation Department. William E. Ashley, Jr., chairman of the course, looks over a target just shot by Bonnie Cichorz, 13, one of four girls taking the course. State Trooper E. O. Cummings was in charge of the firing line. Acting as coaches were Charles Price, Leslie Nelms, John Pierce, Raymond Powell, Alpine Barrett, Septh Walters, Milford White, Lenard Williams, and Philip Shoemaker.

## Albemarle Rodeo

Winners of last summer's Ben Jarman Memorial Fishing Rodeo for youngsters are shown at Polaris Farm, home of Mr. and Mrs. Magruder Dent. Barry Houchens took the grand prize; Susan Morris, first prize for girls; Warren Hoover and Skip Rudolph, smallest fish awards. Other winners were Mike Grinnell, Leslie Robinson, Gary Gianinny, Dale Deane, Jeff Deane, Erica Beaurline, Simone Dreifus, Susan Burton, Tim Ryalls, Sheryl Jones, Perry Sanner, Debbie Bickers, Bobbie Hughes, Cindy Wade, Michael Price, and Steve Kirschnick. The late Christopher A. Greene, then Albemarle Chapter Izaak Walton League president, stood with the happy children. There's no doubt this active conservationist and outdoor writer will be fondly remembered and greatly missed at '68 rodeo time.

Daily Progress photo





# ON THE WATERFRONT



Edited by JIM KERRICK

## Lifesaving Devices Save Lives

Coast Guard officials commented recently that it would be interesting to know how many boatmen have saved their lives by using lifesaving devices when involved in a boating accident.

Accident statistics, however, measure failures rather than successes.

The statistics we have compiled since 1961 with regard to lifesaving devices have consistently shown the vast majority of persons who die in boating accidents do not use lifesaving devices.

For example, during 1965, 89 percent of the 1360 boating fatalities did not use a lifesaving device. However, the Coast Guard was not able to determine how many of that 89 percent had lifesaving devices available in the boat, but simply chose not to use them.

Last year the Coast Guard specifically examined each fatal boating accident in an attempt to answer this question. Unfortunately, they were unable to make a determination, due to incomplete information in 415 of the 1172 drownings which occurred in 1966.

Complete data was available on 757 of the 1172 drowning victims. Of these 757, 666 did not use a lifesaving device. However, 55 percent of those who did not use a device, did have one readily available in the boat. In most cases these individuals elected to disregard the device and attempted to swim to shore.

It is as important as ever that an adequate Coast Guard approved lifesaving device be carried for each person on board a motorboat. The Coast Guard's statistical analysis clearly shows it is equally important to educate the public in the prudent use of these devices.

Non-swimmers should be encouraged to wear a lifesaving device at all times while on board a boat. As might be expected, very few non-swimmers survived boating accidents if they did not use a lifesaving device.

Other boatmen should don a device whenever the possibility of an accident increases, as in deteriorating weather

or water conditions. Likewise, boatmen should learn to keep lifesaving devices readily available and instinctively grab for them when an accident occurs.

## Selecting the Right Prop

It could be that your boat is not performing as it should because of the prop.

Sometimes the prop that comes with the engine is not right. Standard props that come with new engines are designed to allow the engine to run at its rated RPM and horsepower, at full throttle on an average boat with an average load. With the many varieties of boats on the market today, the engine with standard prop may not be compatible with a particular hull. On many installations, the prop should be changed before the first run is made.

There is only one way to make sure your rig has the correct prop, and that's have your marine dealer measure engine RPM's with a tachometer. All tests should be conducted at full throttle under normal load situations. "Under normal load situations" is the key phrase to remember.

Conducting the test is simple. Your owner's manual lists the correct range for your engine. At full throttle the dealer can check the tachometer to see if the RPM reading corresponds to the manual's recommendations.

If the reading exceeds the maximum, you need a propeller with more pitch. The greater the pitch, the greater the bite the blades make into the water.

An engine turning less than the minimum RPM's needs a propeller with less pitch. In this case the propeller is taking too big a bite, and the engine cannot produce enough torque to turn the propeller fast enough.

Water skiing enthusiasts need a prop that will deliver the necessary initial thrust to pull the skier to the surface. Chances are a ski prop will allow the engine to run slightly over the maximum RPM when not pulling skiers. In this case, retard the throttle until the engine returns to the maximum recommended RPM level.

## Weather Deserves Respect

### SMALL BOAT SWAMPED IN SQUALL; ALL ON BOARD LOST

How often have you seen similar headlines? And what can be done to prevent this unnecessary loss of life?

KNOW and RESPECT the weather. Some of the factors affecting boating safety are wind and waves, fog, lightning and heavy rain. Of these, high winds and waves—resulting from thunderstorms, squalls and cold fronts—are the most dangerous.

The sudden squall or thunderstorm causes many a skipper to be caught off guard with little or no knowledge of what measures to take to keep his craft afloat. An eye should be peeled at all times for cloud formations that suddenly appear. Notice should be taken if the water suddenly starts to become more choppy, or if the wind should make a sudden change. When these conditions occur, the skipper should head back to his mooring site, if time allows. If it does not, head for the nearest shore and try to get into a small cove for protection. In the event a skipper is unable to make shore, he should try to anchor into the wind. If he does not have an anchor with him, he can use a pail or bucket as a sea anchor.

In any case always try to keep the bow into the wind. Have all occupants put on life preservers. Tie down all equipment that you can, or stow the equipment in lockers, so it cannot bounce around and possibly injure someone. If you are in dense fog, you should sound your sounding device at least once every minute to alert any other vessel that might ram you.

Before you start out on any cruise, fishing trip, or even put your boat into the water, you should check with the local weather station to determine what kind of weather is forecast for the area where you will be boating. If there is doubt, be extra cautious, or even stay at home.

Caution, respect for the water, and common sense can prevent a great many unnecessary tragedies.



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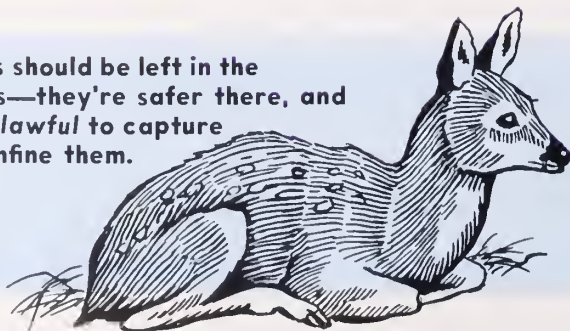
It's Unlawful to keep

# Wildlife in Captivity

Wildlife is the property of the State, and may be kept in personal possession only during established seasons, and then only when taken by lawful means. This applies to capturing and keeping alive as well as killing. It is illegal, therefore, to possess wild birds and game animals, *dead or alive*, except during authorized seasons, and in any event wildlife protected by closed seasons may not be kept in captivity. Species protected by closed seasons include bear, deer, fox, rabbit, squirrel, beaver, mink, muskrat, opossum, otter, raccoon, and all native wild birds except crows, buzzards and jays.



Bear cubs are frequently involved in illegal possession cases.



Fawns should be left in the woods—they're safer there, and it's *unlawful* to capture or confine them.



GRAY SQUIRREL



COTTONTAIL



RACCOON

Although game species, none of the above mammals may be legally kept in captivity.